

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listing of claims in the application.

LISTING OF CLAIMS:

1 -13. (Canceled)

14. (New) A thermal type flow measuring instrument comprising:

a sensing element for sensing an air flow;

an electronic circuit electrically connected to said sensing element; and

a frame- or box-shaped plastic casing component for accommodating

and protecting said electronic circuit, said plastic casing component being a housing constructed from plastic as an injection molded part formed by integral molding together with a connector terminal which is extended from an inside to an outside of said plastic casing component while penetrating therethrough for electrical connection of said electronic circuit to an external device,

said housing further including a fixing portion molded from plastic with a metal plate inserted therein for attachment to a duct component serving as a passage through which a fluid to be measured flows, said metal plate being entirely or partially covered with the plastic, and said metal plate having an opening formed adjacent a corner of said metal plate in a plastic-covered portion thereof, said opening being filled with said plastic to thereby join the plastic on one surface of said metal plate with the plastic on an opposite surface of said metal plate.

15. (New) A thermal type flow measuring instrument according to claim 14, wherein said fixing portion has a flange formed by integral molding said metal plate, and said metal plate has a hole through which said connector terminal penetrates and which is filled with the plastic.

16. (New) A thermal type flow measuring instrument according to claim 14, wherein said opening serves as a flow passage to introduce molten plastic from one surface to an opposite surface of said metal plate, or said opening serves to interfere with a flow of the molten plastic so that speeds of the molten plastics flowing along both the surfaces of said metal plate differ from each other during injection molding of said housing.

17. (New) A thermal type flow measuring instrument according to claim 14, wherein said opening acts to form a weld line of the plastics molded to form said housing in a position inside an outer periphery of said metal plate.

18. (New) A thermal type flow measuring instrument according to claim 14, further comprising a sensing element for sensing an air flow and an electronic circuit electrically connected to said sensing element, and

wherein said connector terminal has a sub connector terminal branched from said connector terminal, and said sub connector terminal is extended in a portion in which a plastic molded to form said housing has a relatively large thickness.

19. (New) A thermal type flow measuring instrument according to claim 18, wherein said sub connector terminal branched from said connector terminal has a fore end remaining in said plastic molded to form said plastic casing component and is not exposed to the exterior.

20. (New) A thermal type flow measuring instrument according to claim 18, wherein said sub connector terminal is formed at an inclination so that flow directions of molten plastics during injection molding of said housing differ from each other between an upstream side and a downstream side of said sub connector terminal.

21. (New) A thermal type flow measuring instrument according to claim 14, further comprising a sensing element for sensing an air flow and an electronic circuit electrically connected to said sensing element and along said connector terminal from an inside to an outside of said housing while penetrating therethrough, and a gate for injection molding of said housing is formed near an end of said vent pipe to flow a molten plastic in a direction parallel to a longitudinal direction of said vent pipe.

22. (New) A thermal type flow measuring instrument according to claim 21, wherein a direction in which the plastic is injected from said gate is substantially perpendicular to said metal plate, and an extend of the injection is within a projected area of an opening formed in special metal plate, through which said connector terminal penetrates.

23. (New) An engine-control system comprising a thermal type flow measuring instrument according to claim 14, fuel delivery means, and a controller for controlling said fuel delivery means in accordance with a signal from said thermal type flow measuring instrument.